GridWise Architecture Council Gathering
Dallas, Texas
November 11-12, 2004

Meeting Minutes

Prepared 15 November, 2004

The meeting was held from November 11-12, 2004 at the Marriott Las Colinas in Dallas Texas and led by Rik Drummond, Chairperson Pro-Tem. The following individuals were present:

GridWise Architecture Council (GWAC) Members

Ron Ambrosio, IBM T.J. Watson Research Center

Jay Britton, AREVA-T&D Corporation

David Cohen, Infotility

Rik Drummond, Drummond Group Inc.

Albert Esser, Emerson Network Power

Erich Gunther, EnerNex Corporation

Stephanie Hamilton, Southern California Edison (SCE)

Larsh Johnson, eMeter Corporation (November 11)

Jack McGowan, Energy Controls, Inc.

Wade Troxell, Colorado State University

Vito Stagliano, Calpine Corporation

Don Watkins, Bonneville Power Administration

Eric Wong, Cummins Inc.

Architecture Council Support

Steve Widergren, PNNL

Mia Bosquet, PNNL

Guests

Dick Brooks, ISO-NE (November 11)

Steve Hauser, GridWise Alliance, (November 11)

Phil Niedzielski-Eichner, Resource Consultants, Inc. (November 11)

Rob Pratt, PNNL (November 11)

Alison Silverstein, Consultant, (November 12)

Meeting Openers

Proprietary Information Notice

The members were reminded of the proprietary information disclosure policy from the Bylaws.

Welcome

The thirteenth member of the GridWise Architecture Council (GWAC), Don Watkins of Bonneville Power Administration, was introduced and presented with a letter of recognition from the OETD Acting Director, Bill Parks, extending thanks to the Don and BPA for their participation in this endeavor. Albert Esser was also introduced as it was his first face-to-face meeting with the GWAC.

October Meeting Minutes

The minutes for the October 4, 2004 teleconference meeting were approved with no dissentions.

Constitution Discussion

Rik Drummond presented the process sequence for moving forward with the Constitution. This involves presenting statements about scope, technical vision, and characteristics, then moving this initial material through an interview phase to listen to and record stakeholder concerns while developing buy-in. Erich Gunther supported the process – noting that it is very similar to the Stakeholder Engagement Process that IntelliGrid (IECSA) defined. He mentioned that IntelliGrid has an extensive contact list that we can call on.

Discussion about the Constitution highlighted the need to identify the strategic drivers and emphasize that our architecture work is enabling—keeping the Constitution at a high level, with a long-term perspective and not involved in the details of design.

Actions: Rik Drummond to update introductory statements to reflect group discussion. All GWAC members to provide statements and comments for constitution (following process calendar). Working Group members will compile statement ideas and reformulate into principle option statements. A WebEx conference is to be arranged to review the interview process in approximately one month.

Longer-term actions will be to assemble a strawman interview document, test, refine and prepare the interview process, leading to the launching of the interview phase at the next face-to-face meeting. Multiple interview/feedback/refinement loops will be needed, with the objective of publishing an initial constitution in 2006, followed by secondary documents and longer-term governance of the Constitution.

CEIDS and IntelliGrid Introduction

T.J. Glauthier presented an overview of the Consortium for Electric Infrastructure to Support a Digital Society (CEIDS) and 'IntelliGrid'. Glauthier informed the members that under the leadership of their new CEO, Dr. Steve Specker, a restructuring of the EPRI family of

companies is underway. The Electric Innovation Institute (E2I) and other EPRI companies are being merged back into EPRI. Also, the CEIDS initiative will now be called the IntelliGrid Consortium.

Glauthier presented the IntelliGrid partners, vision, and plan, along with a brief introduction to the IntelliGrid Architecture, Advanced Distribution Automation/Distributed Energy Resources (ADA/DER), and Fast Simulation and Modeling (FSM) projects. Erich Gunther presented further details on the IntelliGrid Architecture, describing how the project was led, the partners and methods involved, and how the results can be used.

GWAC members are encouraged to visit the on-line IntelliGrid website (http://www.intelligrid.info) and become familiar with the resources available in the IntelliGrid Architecture.

Members observed that the issue of communicating between power engineers, IT people, and software engineers is a national engineering issue. The need for information technology savvy power engineers and the need for strong communication between these areas of expertise could be a major impediment to moving the electric power industry into the 21st century. A related key area involves common language, definition of terms, support for multiple, localized languages of terminology, and mapping between them. Ron Ambrosio noted that the IEC/ISO has a standard on metadata registries. To influence interoperability approaches, GWAC members need to understand concepts such as ontology, taxonomy, metadata, semantics, and knowledge management.

Actions: All GWAC members become familiar with IntelliGrid resources. Provide clarity on the respective scopes and roles and synergies between IntelliGrid and the GWAC.

ebXML in ERCOT and Ireland: "Service Oriented Architectures within the Energy Industry"

Dick Brooks presented an overview of the ebXML framework (e-Business eXtended Mark-up Language Framework) and examples of implementations of Service Oriented Architectures in Ireland and in ERCOT. Brooks introduced the key components of ebXML and the overall framework which enables legally binding inter-company business transactions.

The IEC TC57 WG 16—Data Communication Standards for Electricity Markets, Jim Waight (Siemens) convener – has been heavily influenced by ERCOT's B2B project. Though WG 16 appears to be developing a common ontology, standards for registries/repositories (such as designed in ebXML), and the evolution of this material, are not being addressed.

Dick's presentation also generated discussion about the ISO/RTO Council and its Information Technology Committee (ITC), which includes an Architecture Working Group (AWG).

Action: Don Watkins to communicate with the ISO-RTO ITC about the workings of the GridWise Architecture Council, and investigate possibilities for inviting ITC member to the next GWAC meeting.

Administration

Group Name Synopsis

Following contacts with the GridWise Alliance and E2I CEIDS, the Group Name Task Force was sensitive to the GridWise Alliance concern that the word 'Board' caused confusion with their Alliance Board, but the word 'Architecture' still seems descriptive and appropriate to most members. The members noted that this could still remain a sensitive issue for IntelliGrid, though Erich Gunther thought that this may now be less of an issue. A motion to rename this group the "GridWise Architecture Council" was approved with no dissensions. Before formally announcing this name change, Erich Gunther will discuss it with the appropriate EPRI staff and report back to the group.

Actions: Erich Gunther to review the new group name with EPRI IntelliGrid leadership.

SharePoint

Mia introduced the capabilities of the GWAC SharePoint collaboration website. Members are encouraged to visit and use this facility. If technical difficulties are encountered, or you cannot find information after a few tries, please contact Mia Bosquet. Note, PNNL cyber security policy issues may result in relocating the website to a new host.

Liaisons

Steve Hauser presented an update on the GridWise Alliance. As a current and active member of both the GWAC and the GridWise Alliance, Ron Ambrosio was recognized to act as liaison between these two groups. Likewise, Erich Gunther will be the liaison between the GWAC and IntelliGrid.

Mia Bosquet presented a general overview of outreach activities for the GWAC, and the areas where GWAC member input will be appreciated.

Actions: Mia Bosquet to establish an on-going spreadsheet of outreach efforts and opportunities. All members to provide notification about their publications, speaking engagements or other outreach efforts related to the GWAC.

Schedule of Future Meetings and Topics

A spreadsheet with proposed dates for future meetings will be posted on the SharePoint website. Additional names of prospective speakers will be added to the list of possible topics. A speaker from CEC will be sought for the San Diego meeting on their demand response efforts. The May meeting at the IBM Watson Research Center provides opportunities for guest speakers to talk about IT subjects. As mentioned in earlier, Don Watkins is to see about arrangements for an ITC member to present an overview of their group, including their work in market design. Also, Eric Lightner will try to be available at the next meeting to discuss OETD, his program, and DOE's expectations of the GWAC.

Actions: Mia Bosquet to circulate a spreadsheet of meeting dates. GWAC members to confirm their availability. Steve Widergren is to work with Jack McGowan to consider GWAC presence at BuilConn.

Illustrative Scenario

Jack McGowan presented preliminary progress on the topic of illustrative scenarios. Discussion centered on the purpose, scope, format and specific topic(s) for scenarios. Purposes for the scenario included 1) demonstrate enabling capabilities of the vision in concrete terms, and 2) show the focus of the GWAC in enabling this vision. Erich Gunther suggested that selected scenarios developed by the IntelliGrid project may be suitable.

Actions: Erich Gunther will suggest about three key scenarios from IntelliGrid and distribute them to the working group. Working group members will develop and choose a few key scenarios as starting points. A conference call is to be arranged the first week of December.

Elevator Story

Ron Ambrosio discussed the elevator story presentation prepared to date. He will be presenting an overview of the GWAC to the GridWise Alliance using this elevator story on November 18. Short forms of Illustrative Scenarios can be integrated when they have matured. The members provided Ron with several suggestions to improve the material.

During this review, the synthesized vision statements from the July, 2004 meeting were touched upon. Though there is general agreement with these statements, suggestions were made for revisions. (E.g., highlight the new, differentiating ideas versus the platitudes.)

Actions: Ron Ambrosio to update the elevator story based on the suggestions from the meeting. These included using a commercial building example rather than residential, including the regulatory aspects, and eventually providing context of how the GWAC fits with other closely related organizations and efforts such as the GridWise Alliance, IntelliGrid, etc. Longer-term actions include drafting a short white paper to complement the presentation and assembling other elevator pitch material.

GWAC members provide comments on the vision statements to Steve Widergren. These can then be incorporated into other works such as the elevator story and the constitution.

Overview of US Electric Energy Markets

GWAC member, Vito Stagliano, presented an overview of US Electric Energy Markets, including the topics of laws and regulations, jurisdictional divide, RTO/ISO variants, congestion, transmission construction issues, power market mitigation, and real-time economic dispatch. Specific examples and comparisons were provided from a number of regional markets.

Don Watkins noted that we need to enable markets, but not get trapped in arguments with those that are hesitating to embrace markets in their regions of operation.

Action: Jay Britton asked Vito Stagliano to provide references on studies related to RTOs showing trends to improved reliability and improve rates in regions which implement market systems.

Roadmap

Steve Widergren presented suggestions for a near-term and longer-term roadmap for GWAC activities and deliverables. Assembling and maintaining a roadmap is important to provide context and clarification to our activities amongst ourselves as well as to communicate our directions to DOE, the GridWise Alliance, and other interested bodies. The near-term items are being revised as a result of progress from the working groups at this meeting. The long-term items seem reasonable to the members at this time but will need to be reviewed as we move forward.

Steve noted that some funding is available for studies and research into items of interest to the GWAC. This can include a request for proposal process to attract outside ideas and bring them before the members for their review and incorporation in GWAC deliverables.

Actions: Steve Widergren to update the near-term plan as a result of information from this meeting and adjust the long-term activities accordingly.

The Smart Grid -- Some Cautions and Concerns

Alison Silverstein presented a regulatory and policy perspective on GridWise transformation, challenging GWAC members to consider a number of technology, regulatory, cost-benefit and societal issues. Silverstein advises that it is urgent to clarify between GridWise and IntelliGrid with a simple, succinct set of messages and to solidly keep the customer's interest at heart.

Working Group Review and Actions

Each working group—Constitution, Illustrative Scenario, and Elevator Pitch—reviewed their progress and set forth an action plan. The immediate items of these action plans are summarized below. Longer-term options and suggestions for each working group have also been noted and are reflected in the action plans of each group.

Action Items

Longer-term action items do not appear below. They are included in the action plans of each working group and will be reflected in the GWAC road map.

#	Item	Owner	Due Date
1.	Update introductory Constitution statements to reflect group discussion. All GWAC members to provide statements and comments for constitution (following process calendar).	Drummond	19 Nov 04
2.	Compile Constitution statement ideas, reformulate into principle option statements; assemble strawman interview document; AB members provide feedback on strawman.	Drummond (lead) Watkins, Hamilton, McGowan, Ambrosio, Gunther, Troxell	10 Dec 04
3.	Schedule WebEx conference to review the Constitution interview process.	Drummond	17 Dec 04
4.	All GWAC members become familiar with IntelliGrid resources.	All GWAC	26 Nov 04
5.	Communicate with the ISO-RTO ITC about the workings of the GridWise Architecture Council, and investigate possibilities for inviting ITC member to the next GWAC meeting.	Watkins	17 Dec 04
6.	Review the new group name with EPRI IntelliGrid leadership	Gunther	19 Nov 04
7.	Establish an on-going spreadsheet of outreach efforts and opportunities.	Bosquet	19 Nov 04
8.	Provide notification about their publications, speaking engagements or other outreach efforts related to the GWAC.	All GWAC	On-going
9.	Circulate a spreadsheet of meeting dates. GWAC members to confirm their availability.	Bosquet	16 Nov 04
10.	GWAC members to confirm their availability for the meeting schedule through September, 2005.	All GWAC	19 Nov 04
11.	Consider GWAC presence at BuilConn.	Widergren	Dec 04

		McGowan	
12.	Suggest about three key scenarios from IntelliGrid and distribute them to the working group.	Gunther	22 Nov 04
13.	Develop and choose a few key scenarios as starting points. A conference call is to be arranged the first week of December.	McGowan (lead) Wong Britton Johnson Cohen	30 Nov 04
14.	Update the elevator story based on the suggestions from the meeting.	Ambrosio	17 Nov 04
15.	Formulate context of how the GWAC fits with other closely related organizations and efforts such as the GridWise Alliance, IntelliGrid, etc. Provide clarity on the respective scopes and roles and synergies between IntelliGrid and the GWAC.	Widergren (lead) Ambrosio Gunther	19 Nov 04
16.	Provide comments on the vision statements to Steve Widergren.	All GWAC	30 Nov 04
17.	Provide references on studies related to RTOs showing trends to improved reliability and improve rates in regions which implement market systems.	Stagliano	19 Nov 04
18.	Update the near-term plan as a result of information from this meeting and adjust the long-term activities accordingly.	Widergren	30 Nov 04